

## CLAIMS

1. A video color signal transmission system comprising:

a plurality of selectable sources of sets of video color signals, each set selectable for transmission and including red, green and blue video color signals, a plurality of transmitters, one of each for one of each of said red, green and blue video color signals of a selected said set, each said transmitter including:

a single ended to balanced signal converter responsive to each said video color signal, thereby providing sets of balanced red, green and blue video color signal outputs,

a transmission cable comprising:

a plurality of twisted pair communications lines, each twisted pair communications line having a first end and a second end, said first end of each said twisted pair communications line coupled to a one of said balanced video color signal outputs and said second end of each said twisted pair communications line providing a balanced one of said red, green and blue video color signal outputs, with a twist rate of each said twisted pair communications line effecting a signal delay;

a plurality of receivers, one of each for one of each said red, green and blue video color signal, each said receiver comprising:

a balanced input coupled to said second end of a respective said communications line of said communications cable,

an amplifier and balanced to single ended converter coupled to

23 said balanced input, and  
24 a single-ended video signal color output couplable from said balanced to  
25 single-ended converter to a selected one of a plurality of monitors;  
26 said system also including a high frequency booster for each said video  
27 color signal.

1 2. A transmission system as set forth in claim 1 wherein said twist rate of at  
2 least two of said twisted pair communications lines is different.

1 3. A transmission system as set forth in claim 1 further comprising a signal  
2 delay circuit coupled to one of each of at least two of said second ends of each  
3 said twisted pair communications line wherein said two of said three video color  
4 signals are delayed.

5  
4. A transmission system as set forth in claim 3 wherein each said signal delay  
circuit provides a different delay to two of said three video color signals.

5. A transmission system as set forth in claim 3 wherein each said signal delay  
circuit includes a transmission line of selectively variable length and switches for  
selectively inserting one of more of a length of said transmission line, providing a  
selection of one of a plurality of signal delays.

1 6. A transmission system as set forth in claim 1 wherein the twist rate of said  
2 twisted pair communications line carrying the red color signal has a lowest twist  
3 rate and the twisted pair communications line having a next largest twist rate  
4 carries the green color signal.

1 7. A transmission system as set forth in claim 1 wherein:

2 said transmission cable includes a synchronization twisted pair  
3 communications line having first and second ends,

4 a source of synchronization signals coupled to said first end of said  
5 synchronization twisted pair communications line, and said second end of said  
6 synchronization twisted pair communications line being couplable to said  
7 monitor; and

8 said synchronization twisted pair communications line has a highest  
9 twist rate of any of said twisted pair communications lines of said cable.

1 8. A video color transmission system as set forth in claim 1 including a high  
2 frequency video color signal boost circuit for each said video color signal, each  
3 said high frequency video color signal boost circuit being incorporated in a  
4 respective said balanced to single-ended output circuitry.

5 9. A video color transmission system as set forth in claim 8 wherein each of said  
6 high frequency video color signal boost circuits includes a plurality of reactances,  
7 each of said plurality of reactances having a time constant for boosting a  
8 particular frequency range.

9 10. A transmission system as set forth in claim 3 wherein each said signal delay  
10 circuit is a balanced transmission line.